SUPPLEMENTARY MATERIAL

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Appendix Supplement 3	PRISMA flow diagram; study identification and selection
Appendix Supplement 4	Assessment of risk of bias
Appendix Supplement 5	Effect of PCI on 5-year risk of major adverse cardiac and cerebrovascular events, by SYNTAX score
Appendix Supplement 6	Effect of PCI on 3-5 years risk of the composite end-point of death, stroke, or myocardial infarction, by SYNTAX score
Appendix Supplement 7	Assessment of small study effects by funnel plots and Egger's regression symmetry tests

Appendix Supplement 1 PRISMA checklist

Section/topic	Item No	Checklist item	Reported on page No
Title			
Title	1	Identify the report as a systematic review, meta-analysis, or both	Title page
Abstract			
Structured summary	2	Provide a structured summary including, as applicable, background, objectives, data sources, study eligibility criteria, participants, interventions, study appraisal and synthesis methods, results, limitations, conclusions and implications of key findings, systematic review registration number	Abstract
Introduction			
Rationale	3	Describe the rationale for the review in the context of what is already known	Introduction
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS)	Methods
Methods			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (such as web address), and, if available, provide registration information including registration number	Not applicable
Eligibility criteria	6	Specify study characteristics (such as PICOS, length of follow-up) and report characteristics (such as years considered, language, publication status) used as criteria for eligibility, giving rationale	Methods
Information sources	7	Describe all information sources (such as databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched	Methods
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated	Appendix Supplement 2
Study selection	9	State the process for selecting studies (that is, screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis)	Methods
Data collection process	10	Describe method of data extraction from reports (such as piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators	Methods
Data items	11	List and define all variables for which data were sought (such as PICOS, funding sources) and any assumptions and simplifications made	Methods
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis	Methods
Summary measures	13	State the principal summary measures (such as risk ratio, difference in means).	Methods
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (such as I^2 statistic) for each meta-analysis	Methods
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (such as publication bias, selective reporting within studies)	Methods
Additional analyses	16	Describe methods of additional analyses (such as sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified	Methods
Results			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram	Results and Figure 1
Study characteristics	18	For each study, present characteristics for which data were extracted (such as study size, PICOS, follow-up period) and provide the citations	Results and Table 1
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome-level assessment (see item 12).	Results and Table 1
Results of individual studies	20	For all outcomes considered (benefits or harms), present for each study (a) simple summary data for each intervention group and (b) effect estimates and confidence intervals, ideally with a forest plot	Results

Section/topic	Item No	Checklist item	Reported on page No
Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency	Results and Figures 2-5
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see item 15)	Results and Appendix Supplement 3
Additional analysis	23	Give results of additional analyses, if done (such as sensitivity or subgroup analyses, meta-regression) (see item 16)	Results
Discussion			
Summary of evidence	24	Summarise the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (such as health care providers, users, and policy makers)	Discussion
Limitations	25	Discuss limitations at study and outcome level (such as risk of bias), and at review level (such as incomplete retrieval of identified research, reporting bias)	Discussion
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research	Discussion
Funding			
Funding	27	Describe sources of funding for the systematic review and other support (such as supply of data) and role of funders for the systematic review	None

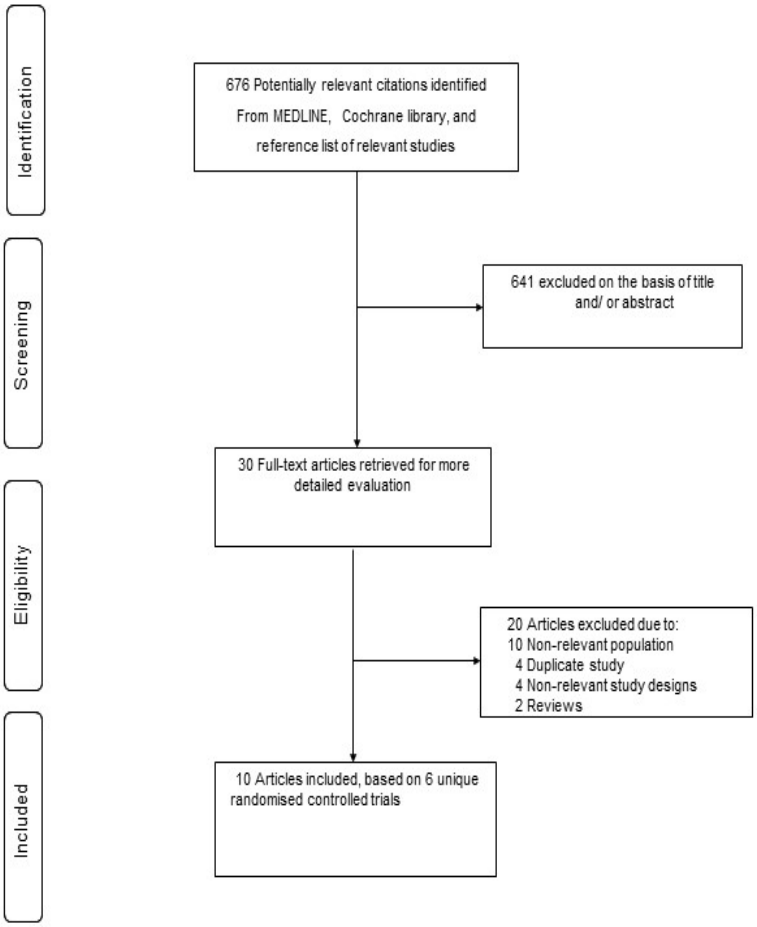
Appendix Supplement 2 MEDLINE literature search strategy

Relevant randomised controlled trials, published from inception to November 09, 2016 (date last searched), were identified through electronic searches not limited to the English language using MEDLINE, EMBASE, Web of Science, and Cochrane databases. Electronic searches were supplemented by scanning reference lists of articles identified for all relevant studies (including review articles), and by hand searching of relevant journals. The computer-based searches combined search terms related to (1) the interventions (e.g., *percutaneous coronary interventions and coronary artery bypass graft*) and (2) population (e.g., *left main coronary artery*) in humans, without any language restriction.

1 percutaneous coronary intervention.mp. or exp Percutaneous Coronary Intervention/ (50896)
2 exp Coronary Artery Bypass/ or coronary artery bypass graft.mp. (51687)
3 exp Coronary Stenosis/ or exp Coronary Disease/ or left main coronary artery.mp. (201076)
4 randomized controlled trial.mp. or exp Randomized Controlled Trial/ (450327)
5 Clinical Trial.mp. or exp Clinical Trial/ (815558)
6 4 or 5 (829294)
7 1 and 2 and 3 and 6 (520)
8 limit 7 to humans (520)

Each part was specifically translated for searching alternative databases.

Appendix Supplement 3 PRISMA flow diagram; study identification and selection



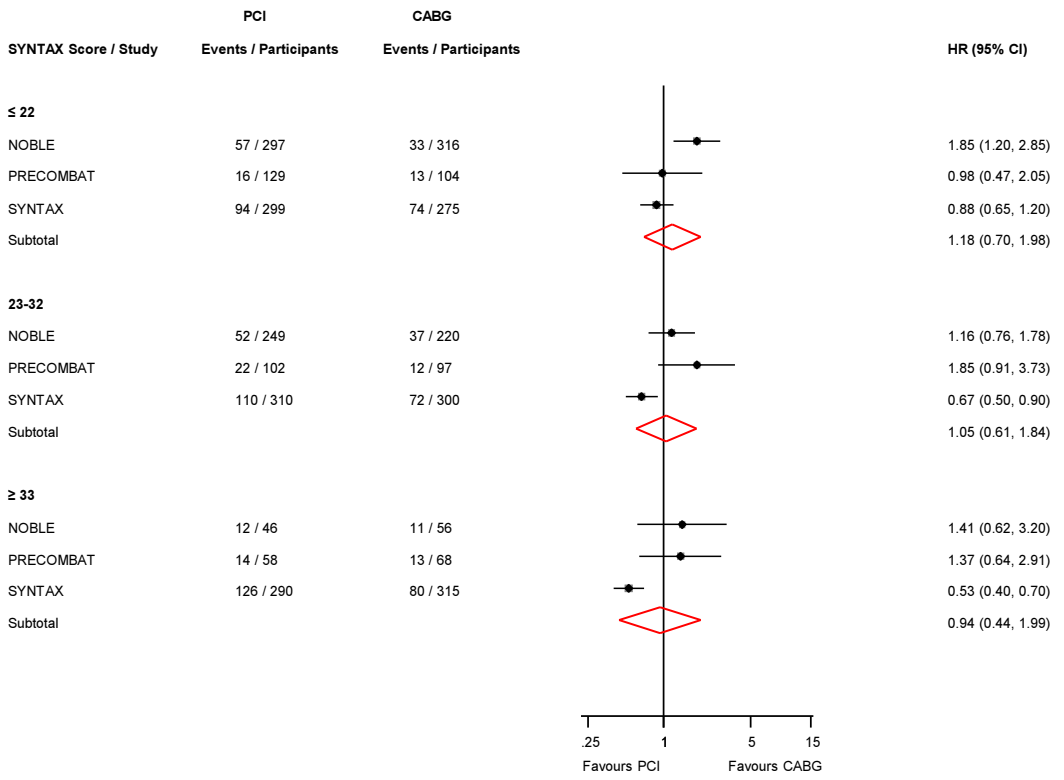
Appendix Supplement 4 Assessment of risk of bias

	Random sequence generation	*Allocation concealment*	*Blinding of participants & personnel*	*Blinding of outcome assessments*	*Incomplete outcome data*	*Selective reporting*	*Other bias*
LE MANS	+	?	-	+	+	+	?
SYNTAX	+	-	-	+	+	+	?
Boudriol et al.	+	?	-	+	+	+	?
PRECOMBAT	+	+	-	+	+	+	?
EXCEL	+	?	-	+	+	+	?
NOBLE	+	?	-	+	+	+	?

+	Low risk of bias
?	Unclear risk of bias
-	High risk of bias

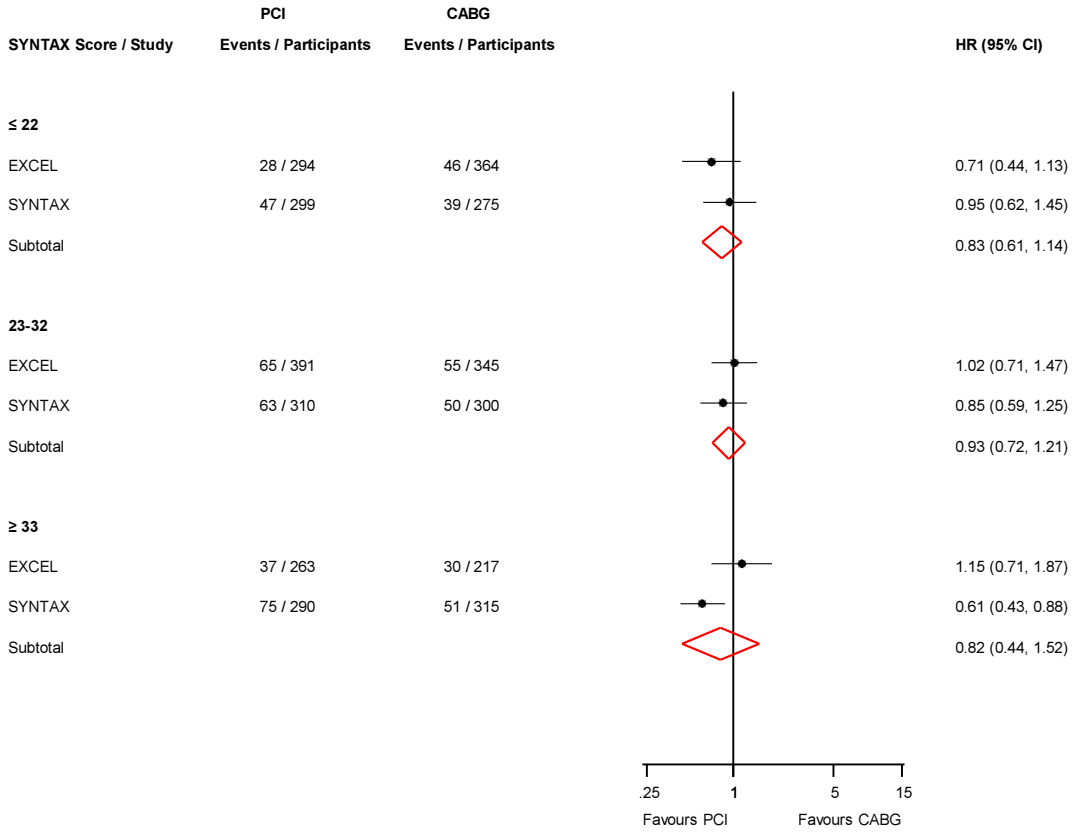
EXCEL, Evaluation of XIENCE versus Coronary Artery Bypass Surgery for Effectiveness of Left Main Revascularization; NOBLE, Nordic-Baltic-British left main revascularisation study; NS, not stated; RCT, randomised controlled trial; SYNTAX, The SYNergy between percutaneous coronary intervention with TAXus and cardiac surgery

Appendix Supplement 5 Effect of PCI on 5-year risk of major adverse cardiac and cerebrovascular events, by SYNTAX score



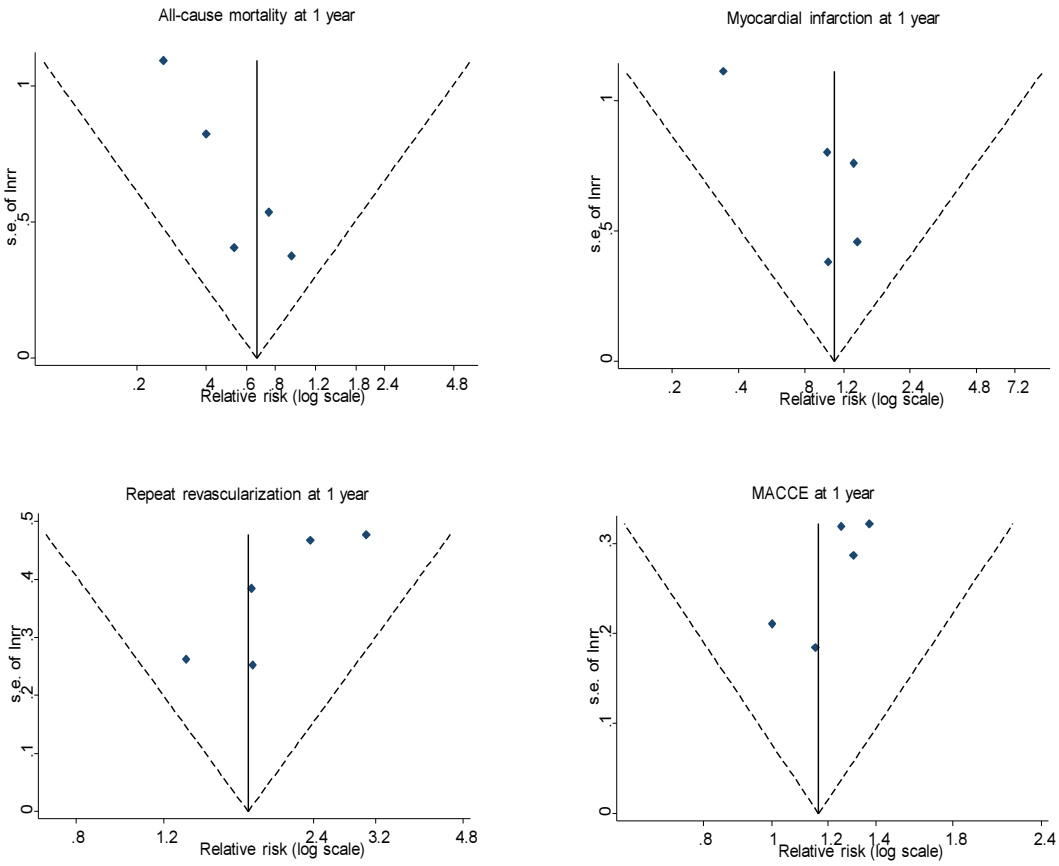
CABG, coronary artery bypass grafting; CI, confidence interval (bars); PCI, percutaneous coronary intervention; HR, hazard ratio; SYNTAX, SYNergy between percutaneous coronary intervention with TAXus and cardiac surgery

Appendix Supplement 6 Effect of PCI on 3-5 years risk of the composite end-point of death, stroke, or myocardial infarction, by SYNTAX score



CABG, coronary artery bypass grafting; CI, confidence interval (bars); PCI, percutaneous coronary intervention; HR, hazard ratio; SYNTAX, SYNergy between percutaneous coronary intervention with TAXus and cardiac surgery

Appendix Supplement 7 Assessment of small study effects by funnel plots and Egger's regression symmetry tests



The dotted lines show 95% confidence intervals around the overall summary estimate calculated using a fixed effect model;; *P*-values for bias calculated using Egger's test were 0.162; 0.367; 0.117; and 0.168 for all-cause mortality; myocardial infarction, repeat revascularization; and MACCE outcomes at 1 year; MACCE, major adverse cardiac and cerebrovascular events